

Amendments to the Specification

Please replace the paragraph beginning on page 25, line 10, with the following rewritten paragraph:

Figs. 15A, 15B and 15C ~~is-are a-diagrams~~ showing a pattern arrangement of a working reticle WR, and pattern arrangement of corresponding master reticle RA and RB produced in the second embodiment of the invention;

Please replace the paragraph beginning on page 68, line 3, with the following rewritten paragraph:

In Fig. 14, an image processing type alignment sensor 225 for detecting positions of the predetermined alignment marks 234A and 234B (see Fig. 15A) on the glass substrate 218 is disposed on the side surface of the projection optical system PL2. An image signal of the alignment sensor 225 is also supplied to the alignment signal processing system 226. The alignment signal processing system 226 processes the image signal and detects a positional deviation amount of the alignment mark with respect to a predetermined detection center, and supplies the positional deviation amount to the main control system 212. A reference mark (not shown) for the alignment sensor 225 is formed on the reference mark member 224. Using the reference mark, a distance (base line amount) between a center (exposure center) of the pattern image of the master reticle to be exposed and the detection center of the alignment sensor 225 is previously obtained, and is stored in the exposure data file 213. When exposure for producing the working reticle is carried out as in the present embodiment, the alignment sensor 225 is not always necessary.

Please replace the paragraph beginning on page 69, line 13, with the following rewritten paragraph:

Figs. 15A, 15B and 15C shows a pattern arrangement of the working reticle WR that is finally produced. In Figs. 15A, 15B and 15C, a direction of the working reticle WR is

shown in a state in which the working reticle is placed on the sample stage 219 in Fig. 14. A pattern region surrounded by a rectangular frame-like light shield band 233 is set on the glass substrate 218 of the working reticle WR. In this pattern region, rectangular partial pattern regions S1, S2, S3, ..., SN are set at predetermined distances from each other and at a predetermined pitch in the X direction and the Y direction (the same pitch in the present embodiment), and a predetermined circuit pattern is formed in each of the partial pattern regions S1 to SN. A predetermined circuit pattern is formed also in each of the boundary regions 235 between the partial pattern regions S1 to SN. A pair of alignment marks 234A and 234B are formed such as to sandwich the light shield band 233 in the X direction. In the present embodiment, the alignment marks 234A and 234B are formed substantially at the same time when the reticle pattern is formed, but the alignment marks 234A and 234B may be previously formed before the reticle pattern is formed.

Please replace the paragraph beginning on page 71, line 4, with the following rewritten paragraph:

Thereafter, a light shield film such as chromium film is formed on the glass substrate 218 shown in Fig. 14, the photoresist is applied on the light shield film and then, the glass substrate 218 is placed on the sample stage 219 of the projection exposure apparatus. The reduced images of patterns of the master reticles R1 to RN are sequentially exposed to light in regions around the partial pattern regions S1 to SN shown in Fig. 15A. Then, the development step, the etching step and the like are carried out, thereby producing the working reticle WR. At that time, in the present embodiment, since the reduced images of the patterns of the master reticles R1 to RN formed by the electron beam drawing apparatus are transferred onto the glass substrate 218, influence caused by the pattern-forming error is reduced into $1/\beta$ as compared with a case in which a circuit pattern on a working reticle is directly formed by the electron beam drawing apparatus like the prior art, and the circuit

pattern of the working reticle WR is formed with extremely high precision. Further, a line width of each the circuit patterns of the master reticles R1 to RN is about $1/\beta$ times of that of prior art, the pattern-forming time of the electron beam drawing apparatus can be shortened, and even when a plurality working reticles are produced, patterns of the master reticles R1 to RN only may be transferred. Therefore, it is possible to largely shorten the producing time of a plurality working reticles as a whole. Further, of the master reticles R1 to RN, those having the same pattern can be the same, the producing time of the master reticles can further be shortened.

Please replace the paragraph beginning on page 80, line 12, with the following rewritten paragraph:

In the present embodiment, in Fig. 16, exposure is carried out such that a trapezoidal accumulated exposure light amount distribution in the X direction and the Y direction can be obtained also in regions sandwiching the partial pattern region SA on the glass substrate 218. Therefore, accumulated exposure light amount distributions on the opposite sides of the accumulated exposure light amount distribution shown with a curved line 244A in Fig. 18A also draw trapezoidal shapes, and a distribution of the accumulated exposure light amount Excimer laser light source 2 on the glass substrate 218 after images of all the master reticles R1 to RN are exposed to light is flat as shown in Fig. 18B. Similarly, a distribution of the accumulated exposure light amount in the Y direction is also flat. In the present embodiment, exposure time with respect to each of the master reticles R1 to RN is set such that a maximum value of the trapezoidal accumulated exposure light amount distribution such as the curved line 244A, i.e., a value of the accumulated exposure light amount Excimer laser light source 2 shown in Fig. 18B becomes an appropriate exposure light amount for photoresist applied on the glass substrate 218. With this setting, the accumulated exposure light amount after the images of the master reticles R1 to RN are exposed to light on the glass substrate 218 in Fig.

15A becomes a flat appropriate exposure light amount in both the partial pattern regions S1 to Sn and the boundary region 235, and high resolution can be obtained also in the boundary region 235 after development.

Please replace the paragraph beginning on page 84, line 12, with the following rewritten paragraph:

Even when the scanning and exposure are carried out and the screens are stitched in this manner, like the case of the working reticle WR in Fig. 15A, in order to reduce the stitching error, images of overlapping portions of two master reticles are overlapped and exposed in a boundary region between the adjacent two partial pattern regions. Further, in order to uniform the exposure light amount distribution, in the overlapping portions, the exposure light amount is set smaller as approaching its outer side.